

peas by the first of May, putting an end to the crops on the sand at Sanford and on the muck at Zellwood.

### DISCUSSION

A commercial muck field of one acre at Zellwood was planted with 50 pounds of Chinese Dwarf edible podded peas on January 14, 1966. These peas made excellent growth, and were staked with bean poles. At the end of two months, they were loaded down with a fine crop of peas. A batch of the peas was picked and taken to the Southland Frozen Foods Plant in Plant City to be stemmed by hand, and quick frozen. The peas were of excellent quality, but the cost of hand labor to pick and stem them was economically prohibitive for the grower.

Fresh edible podded peas bring from \$1.00 to \$1.50 per pound in our specialty markets. A 7 ounce package of edible podded peas, grown, picked, and frozen in the Orient at 1/10 of our labor costs, retails for 49 cents in Florida.

In order to quick freeze edible podded peas for storage and later use, they should be blanched at 175° F for four minutes, and then frozen. When the frozen pods are to be served, they should be cooked for two minutes, and then eaten. Fresh edible podded peas require only four or five minutes of boiling in very little water before serving.

Edible podded peas can be successfully grown in Florida, both on sand and peat, during the cooler winter months from October to April. The frequent hand pickings during a long growing season, coupled with our high labor costs, mean that probably this crop will be limited to a high priced specialty market, and to home gardens where hired labor is not a problem. Mechanical harvesting appears to be impractical for this crop.

### SUMMARY

Edible podded peas, *Pisum sativum* Linn., variety *saccharatum*, belong to the Leguminosae. These peas, also known as sugar or snow peas, have no fibrous lining membrane in the pod. This lack of fiber allows the peas to be picked when the seeds are very immature, cooked for several minutes, and eaten whole, including the pods. Sugar peas, native to the Old World, are better known in Europe and the Orient than in the New World.

Experiments in Sanford, Florida, during the past three years, have shown that several varieties of edible podded peas, namely Chinese Dwarf, Dwarf Gray, Mammoth Melting, Sweet Pod, and Formosa have yielded well, producing as much as 13,798 pounds of peas per acre during the winter months. These peas have responded to trellising and fertilization both on sand and peat. The labor of hand picking the peas at the right stage of maturity is a major economic problem.

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## MARKET STRENGTH—WHERE THERE'S A WILL, THERE'S A WAY

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### ABSTRACT

Over the years many attempts have been made by farm groups to improve marketing conditions. Gentlemen's agreements, marketing or-

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ders, cooperatives, trade associations, advertising and other efforts operating separately have frequently failed to reach original objectives and produce the results desired.

Recently, there has developed within the vegetable industry certain combined marketing programs which give indications of being successful due primarily to the desire and willingness of more than a majority of the growers to make unselfish sacrifices in order to achieve an industry objective of improved returns and orderly marketing.

These programs are discussed in an effort to give industry groups encouragement that a possible solution to basic marketing problems exists, provided a consolidated will among members of an industry cements the foundation of their efforts.

#### DISCUSSION

The old saying, "United we stand, divided we fall," should be the foundation upon which to build market strength within the produce industry. Nevertheless, suspicion, animosities, sectionalism, fears, individualism and plain greed frequently create basic problems which prevent a solid foundation upon which to build. Expressed another way, human nature and attitudes create obstacles which makes cooperation by group action on an organized basis, difficult but not impossible.

We have frequently heard it said, "Farmers just will not work together." Such a blanket accusation may appear to be valid and a fair appraisal on the surface. Regardless, we should take more than a superficial look and not blindly accept dogmatic half truths or questionable axioms. We will use the Florida Celery Industry in an attempt to destroy or at least to cast serious doubt as to the validity of the premise commonly accepted that farmers will not work together.

Celery in Florida possesses an interesting history which is highlighted by the ingenuity of its members. Planting methods, seed development, sub-irrigation techniques, spraying innovations, harvesting mechanics and precooling procedures are only a few phases which are truly outstanding credits to the ability of the industry to improvise and solve basic production problems. Marketing, however, is one aspect which has hung like a sword over the head of an industry, irrespective of the remarkable

progress made by the industry to solve its production and handling problems.

At the present time, within the Florida Celery Industry, we have in operation three different programs of direct and indirect concern and benefit to members of the industry.

The first program is a master sales cooperative, the Florida Fresh Produce Exchange. Its membership is strictly voluntary, yet, it represents over 90% of the industry in volume as well as numbers. The Exchange was organized on January 17, 1961 by leading members of the industry and became operational in early April, 1961. As stated, it is a voluntary organization; therefore, all rules of the Exchange are applicable only to Exchange members.

The Exchange was designed to improve returns to the growers through a more orderly system of marketing. The cooperative as such is not a new concept, nor does it contain or incorporate any unusual innovations except for its size. The Charter and Bylaws are revised versions of standard forms used by many other similar cooperatives, such as the Florida Citrus Exchange and Sunkist Growers of California and were designed or perfected to meet the special needs and requirements of the celery industry. They contain certain compromises necessary to obtain unity.

In general, its members, by means of growers' contracts, have passed complete market control of their celery to the Exchange. The Exchange, in order to market this celery, has signed handler contracts with existing, experienced shippers. These organizations are made authorized sales agencies of the Exchange and in turn operate under the direct control and supervision, as well as instructions from the Exchange. The organizational setup is as follows:

1. A membership comprising almost all celery growers within the State.
2. A Board of Directors of 15 members selected from the membership.
3. A three-man Executive Committee appointed by the Board of Directors from the Board. The Executive Committee is given all the powers of the Board during the interim between Board meetings.
4. A ten-man staff, including a general manager, who is charged with the responsibility of carrying out the policies established by the Board of Directors and in assisting the Executive Committee with its market decisions.

5. A system of authorized sales agencies which physically markets the celery of Exchange members.

The second industry program is a State Celery Marketing Order authorized by the Florida Celery and Sweet Corn Marketing Law, Chapter 573, Florida Statutes. This Marketing Order is administered by the Commissioner of Agriculture of the State of Florida. It was issued August 22, 1961 and became operational during the Fall of 1961. The primary purpose of the Florida Celery Marketing Order is, like the Exchange, to improve returns to the grower, while at the same time, to assure consumers an adequate supply at reasonable prices, through a more orderly system of marketing.

The Marketing Order contains provisions for the industry, through the Commissioner of Agriculture to:

1. Issue quality and container regulations.
2. Prevent unfair trade practices.
3. Advertise and promote Florida Celery.
4. Conduct research.
5. Regulate the current supply situation.

The marketing Order differs from the Exchange in that all regulations and restrictions issued are mandatory upon all growers and handlers in the celery industry.

The third and most recent program of the industry is a Federal Marketing Order which was issued November 15, 1965 and became operational November 18, 1965. The major provision contained within this order provides for the establishment of Base Quantities for all celery producers, determined from their previous history of production. Annual marketing allotments are then issued to each producer, based upon a combination of his established Base Quantity and the amount of celery that should be marketed during the current season, as determined and recommended by an industry committee and approved by the Secretary of Agriculture.

Thus, the industry is using three programs to achieve orderly marketing and improve returns to growers. First, we have the master sales cooperative; second is the State Marketing Order and third, the Federal Marketing Order.

These programs are assumed by some to have been the result of recent efforts. In reality, our present programs are a result of over thirty years of trial and error with various types of voluntary and compulsory programs, all of which have been a source of education and ex-

perience. Almost every conceivable type of program has been attempted at one time or another after many frustrating meetings were held over many years to "cuss" and "discuss" industry problems. Some of these efforts included:

1. Two attempts to operate under Federal Marketing Orders involving grade, size, quality and volume regulations—one in 1934 and another in 1937, with both terminated after operating for one season.
2. Two more attempts, first in 1946 and again in 1955 for Federal Marketing Orders. Both proposals failed in the referendum stage.
3. One effort for a State Marketing Order in 1959 which was dropped in the discussion stage.
4. Numerous unofficial and informal arrangements and attempts to cooperate on a voluntary basis, such as gentlemen's agreements involving pricing, containers, shipping holidays and other marketing techniques.

All such attempts were short-lived and failed, but undoubtedly each in some manner laid the foundation for our present programs. The economic losses following the prosperous World War II years caused a considerable decline in the number of growers, as well as shipping organizations within the state. The mortality rate was staggering and aggravated, ironically, by the profitable freeze of 1957-58. The spirit of cooperation within the industry had reached a rather low ebb following the demoralizing marketing conditions of the 1958-59 season. At the beginning of the 1959-60 season, it was beyond the wildest imagination to visualize the industry joining together into the type of close working relationship and cooperation as now exists. The question may well be asked, "Why and How?"

First, there was enough economic desperation and need within the industry that any straw was worth grabbing. Then too, in time of adversities, economic or otherwise, people are drawn together. Fires, tragedies, sickness and death have the same effect within industries as with humans. To emphasize the economic conditions, the average farm prices for the five seasons before any type of industry programs were initiated were:

1956-57	\$2.29 per crate
1957-58	\$3.18 per crate
1958-59	\$1.42 per crate

1959-60 \$1.69 per crate

1960-61 \$1.71 per crate

Thus, in three of the five seasons, the average farm price was less than \$2.00 per crate. One of the five seasons was a freeze year with inevitable short supply and high prices.

In comparison, the economic conditions or average farm prices per crate since the industry organized its programs have been as follows:

1961-62 \$3.47 per crate

1962-63 \$2.10 per crate

1963-64 \$2.83 per crate

1964-65 \$2.47 per crate

1965-66 \$3.12 per crate

It should be noted that 1961-62 was also a freeze year. There was a short supply of approximately 7,000,000 crates which contributed to the \$3.47 average price per crate. Conversely, last season, 1965-66, the average per crate price was \$3.12, yet, a little over 8,000,000 crates were marketed. This was the greatset number of crates of celery ever shipped during any season from the State of Florida.

For the past five seasons farm prices have averaged over \$2.00 per crate. Call it luck, coincidence or offer any other explanation as no one particular reason can be singled out as the sole factor. However, it is the longest period of consistent and reasonable returns ever experienced by the industry. Such did not occur until the industry developed the will and desire to work together for their mutual benefit. This esprit de corps is the key to market strength—a conviction or willingness to work together for the same aim or objective. Without this starting point, it is impossible to proceed on any sound basis or with any longevity. In addition, there must be a willingness by members of an indus-

try to take the bad along with the good, as well as a readiness to give up a certain amount of individual freedom to undertake independent action. In any program, many of the actions and decisions are not equitable as applied to each individual's immediate situation; however, over a period of time, advantageous actions and decisions have a tendency to balance or offset inequities that might occur in the marketing program.

Therefore, the individual must be satisfied with the results in the long run rather than the daily short-run aspects. There must be a willingness to accept the day to day problems of working together, realizing fully that you do not get something for nothing. You must carry a fair share of the load as well as be ready to make sacrifices as may be required. Otherwise, do not encourage or give indications that you are making a team approach to marketing problems.

None of us can predict what the future holds for produce groups. The past should be viewed only as lost opportunities to guide us. With the present trends in marketing, however, it would appear that the path pioneered by the Florida Celery Industry could be a guide or aid in the future for other commodity groups who are seeking market strength. Already, similar or modified programs incorporating one or more of the features of the celery program have been utilized by the Florida sweet corn, pole bean and watermelon industries. Many such market efforts will be tried and will fail. Mountain tops are not reached on every attempt; yet, where a sincere desire exists, the mountain can be mastered the same as with basic marketing problems if the will to do so exists.

## USE OF PLASTIC STRIPS OVER FERTILIZER BANDS TO REDUCE LEACHING<sup>1</sup>

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ABSTRACT

Elevated plant beds, necessary for rapid water drainage from around roots in most sandy soils, promote serious leaching of certain nutrients. Work with narrow plastic strips was begun in an effort to reduce leaching at minimum cost where full bed cover with plastic is

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